

APPENDIX A

"MARKED UP" CLAIMS ILLUSTRATING THE AMENDMENTS MADE TO THE CLAIMS OF 09/482,181 WITH ENTRY OF THIS AMENDMENT, WITH ADDED TEXT UNDERLINED AND DELETED TEXT STRUCK THROUGH. THE "I" MARK OUTSIDE THE LEFT MARGIN INDICATES LINES WITH TEXT CHANGES

1. A method for ~~surveillance~~ viewing image data from one or more cameras comprising:
 - capturing a plurality of still frames;
 - generating, from said plurality of still frames, a sequence of digital image data sets ~~representing visually perceptible images arrays~~ comprising a full frame and a plurality of differential frames;
 - transmitting said sequence to a camera coordinator;
 - determining, using said sequence, whether an incident is associated with one or more frames in said sequence;
 - transmitting said sequence over a network to an image server, said image server not local to one or more locations performing said capturing and not local to one or more locations of clients for viewing;
 - storing said sequence at said image server; and
 - providing said sequence to one or more clients for viewing by a user.
2. The method according to claim 1 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.
3. The method according to claim 1 wherein said sequence stored at said image server is stored in a format allowing for a pixel to be encoded as a transparent pixel.
4. The method according to claim 1 wherein said sequence stored at said image server comprises a full frame and one or more subsequent differential frames wherein pixels in a differential frame with values within a threshold of corresponding pixels in a preceding frame are set to transparent.

5. The method according to claim 1 wherein said generating creates a sequence of full and differential frames in a format designed for still image display on a client browser and allowing for a pixel to be encoded as a transparent pixel.
6. The method according to claim 5 wherein said sequence is transmitted to said
5 camera coordinator, stored at said camera coordinator, transmitted to said image server, stored at said image server, and viewed by a client all using an image encoding format for still image display on a client browser and allowing for a pixel to be encoded as a transparent pixel.
7. The method according to claim 2 wherein said format is the PNG format.
- 10 8. The method according to claim 2 wherein said format is the GIF format.
9. The method according to claim 1 wherein said ~~deriving~~ determining comprises
computing a percentage value for a differential frame indicating a calculated percentage
change between said differential frame and a preceding frame.
10. The method according to claim 1 wherein said determining comprises comparing a
15 single still frame to a preceding frame.
12. The method according to claim 1 wherein said clients comprise off-the-shelf internet browser software.
13. The method according to claim 1 further comprising:
storing said sequence at said camera coordinator.
- 20 14. The method according to claim 1 wherein said storing comprises storage of sequences for which incidents were detected for later transmission as requested by an image server.
15. The method according to claim 1 wherein said image server includes a network
interface with a high bandwidth capacity allowing for multiple simultaneous client
25 connections.

16. A method for viewing image data from one or more cameras surveillance comprising:

capturing a plurality of still frames as arrays of digital data;

designating a frame in said plurality as a full frame;

5 for a frame subsequent to said full frame, computing a differential frame wherein a pixel in said differential frame that is within a threshold of a geometrically corresponding pixel in a preceding frame is set to transparent;

for a frame subsequent to said full frame, computing a percentage difference indicating a degree of change of pixels from a preceding frame;

10 transmitting a full frame, one or more differential frames, and one or more computed percentages to a camera coordinator;

determining that an incident has occurred using rules-based logic to analyze data received from said frame grabber;

storing frame data, image data, and incident data;

15 transmitting frame data to an image server; and

presenting frame data by said image server to one or more clients for viewing by one or more users.

17. A method for capturing, analyzing, and presenting image data from one or more digital image capture devices comprising:

20 capturing a plurality of digital image frames;

producing a plurality of sequences, said sequences comprising a full frame followed by one or more differential frames wherein pixels in said differential frames are set to transparent when they have a value within a threshold of a value of corresponding pixels in a preceding frame;

25 determining whether an incident is associated with one or more frames;

storing said plurality of sequences; and

presenting one or more sequences to a client viewer in response to a viewer's request or when an incident is associated with a sequence.

18. The method according to claim 17 wherein said determining comprises computing a
30 percentage of pixels that have changed in one frame from one or more preceding frames.

19. The method according to claim 17 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.

20. The method according to claim 17 wherein said storing comprises storage of sequences for which incidents were detected for later transmission as requested by an image server.

21. A method for viewing image data from one or more cameras comprising:
capturing image data at a plurality of cameras, said plurality of cameras each associated
with at least one digital information processing device able to store digital data
representing images;
generating, from said image data, a sequence of digital image data sets representing
visually perceptible images comprising data that can be transmitted over a digital
communications channel;
transmitting said sequence over a first communication network connection to an image
server, said image server not local to at least one of said cameras and not local to one
or more client viewing locations wherein a principal function of said image server is
image delivery to client software for presentation to an observer and wherein said
server's delivery of image data allows a client viewer to display a pseudo real time
representation of an image seen by a camera;
storing said sequence at said image server;
from said image server, in response to a request from a plurality of remote clients,
transmitting said image sequence data over a second network connection to one or
more clients for viewing, such that said clients do not directly connect over said first
network connection to said plurality of cameras; and
wherein said image server allows a plurality of users to view images simple static image
coding.

22. The method according to claim 21 wherein said sequence stored at said image server is stored in a format designed for still image display on a client browser.

23. The method according to claim 22 wherein said format is the PNG format.

24. The method according to claim 22 wherein said format is the GIF format.

25. The method according to claim 21 wherein said clients comprise off-the-shelf internet browser software.

26. The method according to claim 21 wherein said image server includes a network interface with a high bandwidth capacity.